

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions and listings of claims in this application.

Listing of the Claims:

1. (Currently Amended) An arrangement for at least one of analyzing, simulating and monitoring functions and/or structures in a distributed control system (24) that works with a first protocol (29), comprising:

at least one first unit (23, 26) connected to the distributed control system via contacts (5', 6', 6''), the at least one first unit, by means of the first protocol, receives and/or sends task instructions concerning the monitoring functions and/or structures; and

a second unit (22) connected to the first unit and to a tool arrangement interactable with a user and further comprising:

a first computer (21) able to carry out calculation, simulation and/or analysis tasks, or

a second computer connected to the first computer that is adapted to configure the second computer, wherein the second computer is adapted to carry out at least some of the tasks of the first computer,

wherein the at least one first unit transforms, at least those parts in the first protocol (29) that relate to said tasks into a second protocol (28), by means of which the tasks or parts of tasks can be carried out by the second unit (22),

wherein the second unit, by means of the second protocol (28) or a third protocol (27), can communicate with the tool arrangement, which by readings and/or modifications in the first protocol and in the first and second protocols, respectively, can carry out the readings and/or modifications in a same way in the second and third protocols, respectively,

wherein the at least one first unit (23, 26) further comprises at least one microprocessor which communicates partly with the distributed control system by means of a connection, a protocol and a bit speed valid for the distributed control system, and communicates with the second unit (22), ~~and~~

wherein the second unit is equipped with at least one microprocessor adapted to communicate and exchange information with the at least one first unit and the tool arrangement, and.

wherein primary readings and/or modifications in the first protocol on the basis of the analysis and/or monitoring can be carried out by means of secondary readings and/or modifications in the second protocol.

2. (Previously Presented) The arrangement according to claim 1, wherein the second protocol is developed to serve as a common platform for the analysis tasks of two or more systems with different protocols.

3. (Previously Presented) The arrangement according to claim 1, wherein the second unit provides a common time base for units working in parallel.

4. (Previously Presented) The arrangement according to claim 1, wherein the at least one first unit is arranged for independent collection, processing and saving of information from the connected distributed control system and in that the information generated in this way is arranged to be able to be read and/or interpreted via information generated by the second unit (22).

5. (Previously Presented) The arrangement according to claim 1, wherein second parts of task instructions downloaded or transferred from the first computer (21) can be allocated for use in second computer units in different systems.

6. (Previously Presented) The arrangement according to claim 1, wherein during interaction between the first computer and the user, rules are generated for automatic repetition,

and the rules are further modified for a second computer with regard to the collected information and presentation of results of the analysis task.

7. (Previously Presented) The arrangement according to claim 1, wherein the tool arrangement is adapted with a connection arrangement adapted to communicate with one or more of the microprocessors via serial or wireless communication.

8. (Previously Presented) The arrangement according to claim 1, wherein the first or second unit is adapted to communicate via a serial communication in one direction and with a microprocessor (4) via a serial communication towards the other direction and to work with a reduced interface toward users.

9. (Previously Presented) The arrangement according to claim 1, wherein the first or second unit communicates with one or more units via a serial communication by means of the at least one microprocessor and works with a reduced interface toward at least one user, carries out processing of signals from an other unit according to rules attained from the other unit, and comprises a number of units having microprocessors which communicate with serial communication.

10. (Previously Presented) The arrangement according to claim 9, wherein the units further comprise a local clock which respectively is adjusted or related to a clock in the other unit.

11. (Previously Presented) The arrangement of claim 7, wherein the communication is by at least one of USB, Bluetooth and Ethernet.

12. (Previously Presented) The arrangement of claim 8, wherein the serial communication is by at least one of CAN and LIN and the reduced interface is at least one of light diodes and summers.

13. (Previously Presented) The arrangement of claim 9, wherein the serial communication is by at least one of CAN and LIN and the reduced interface is at least one of light diodes and summers.